

REMARKS

The Examiner is thanked for his Office Action.

The claims presently outstanding are Claims 1-38.

The Patent Drawings Objection stated on Form 948 has been noted. Corrected drawings are submitted with this reply.

Art Rejections

The art rejections are all respectfully traversed.

Review of the References

Some of the major technical differences between the references applied and the disclosure of the present application will now be reviewed. Of course, these points in the specification do not define the scope or interpretation of any of the claims; they are listed merely to help appreciate the importance of the claim distinctions which will be reviewed thereafter.

Kaneko appears to show a memory provided with storage locations for texture data representative of a texture pattern to be mapped. **Kaneko** does not appear to show texture packets containing address and dimensionality information relating to the relevant texture map.

Gossett appears to show an address reformatter that performs a float to fixed conversion on the coordinates for basic 1-D, 2-D, and 3-D texturing modes. It does not appear to show passing texture map dimensionality and texture map address locations using texture packets.

If the undersigned attorney has overlooked a relevant teaching in any of the references, the Examiner is requested to point out very specifically where such teaching may be found.

Analysis of Examiner's Rejection

In view of this analysis, it may be seen that there are some significant problems with the Examiner's carefully stated arguments.

Kaneko

The present application discloses texture packets associated with a particular texture map, not a texture pattern. As stated in **Kaneko**, "The texture memory is provided with storage locations for storing texture data representative of a texture pattern to be mapped." Col. 5, ll. 25-29. Further, the "texture packets" referred to in the present application differ from the "texture data" mentioned in **Kaneko**. In **Kaneko**, the address generators 12, 13, calculate the texture addresses in the texture memory based on the input texture coordinates and the generated fill addresses. This puts the actual texture data in an address that corresponds to the fill address where it will be used. Col. 8, ll. 21-24.

In the present application, the texture packets are not literally the texture data, but only identify the dimensionality and location in the texture buffer of the necessary texture map. Though they contain information relating to the texture data, they do not themselves contain the texture data. **Kaneko** is therefore believed to not show the innovations contained in the present application.

The Examiner also cites **Kaneko** as teaching the steps of locating a texture packet identifying the location of a texture map in a memory device (page 5 of Office Action, 4th paragraph). The Examiner equates the texture packets of the present application, which contain address locations and dimensionality information about the relevant texture maps, with the actual texture data from **Kaneko**. But since the texture packets of the present application are different from the actual texture data, and instead point to the texture data, this comparison is faulty. (See, e.g., page 8, ll. 16-23 of the present application.)

Gossett

The Examiner cites **Gossett** for relating the dimensional type of the map with the texture data. The applicant cannot find among the cited passages any reference to passing texture packets which contain addresses of the related texture maps, along with dimensionality information of the particular texture map. Further, since **Kaneko** is not believed to show texture packets, but rather shows texture data representative of the actual texture map, it is believed that the combination of these references fails to show all the elements of any claims of the present application.

Motivation to Combine or Modify

Furthermore, even if all of the claimed elements were present in one or another of the references, the Examiner has not shown that these references could properly be combined and/or modified to meet the claim limitations.¹ None of the cited references mention any motive to modify or combine **Kaneko**, **Gossett** or **Chimoto** nor does any reference mention one of the primary advantages of the present application in terms of the present innovations, namely preserving bus bandwidth that can better be used transmitting other graphics request code.

¹"When prior art references require selective combination ... to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself.... Something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination." *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 5 USPQ2d 1434, 1438 (Fed.Cir. 1988), *quoting Interconnect Planning Corp. v. Feil*, 227 USPQ 543 (Fed.Cir. 1985), and *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick*, 221 USPQ 481 (Fed.Cir. 1984). "While [a reference] may be capable of being modified to run the way [the applicant's] apparatus is claimed, there must be a suggestion or motivation in the reference to do so. See *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) ("The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification."). *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed.Cir. 1990).

Claim Distinctions

Some features of the claims are noted as follows for the Examiner's convenience, but of course these notes do not dictate the interpretation of the claim, nor indicate that some features are more important than others.

None of the references relied on, singly or in any motivated combination, are seen to teach or suggest the claimed features of: "each texture packet being stored in the texture buffer and being associated with a texture map," as recited, with other limitations, in the context of Claim 1.

None of the references relied on, singly or in any motivated combination, are seen to teach or suggest the claimed features of: "locating a texture packet identifying the location of a texture map," as recited, with other limitations, in the context of Claim 9.

None of the references relied on, singly or in any motivated combination, are seen to teach or suggest the claimed features of: "each texture packet being stored in the texture buffer and being associated with a texture map, each texture packet including data relating to the dimensional type of its associated map," as recited, with other limitations, in the context of Claim 21.

None of the references relied on, singly or in any motivated combination, are seen to teach or suggest the claimed features of: "converting the texture map to a one dimensional texture map if the dimension of the texture map is determined to be more than one dimensional," as recited, with other limitations, in the context of Claim 26.

None of the references relied on, singly or in any motivated combination, are seen to teach or suggest the claimed features of: "each dimensional texture map having a first number of consecutive data blocks, the texture processor further including means for locating a second number of consecutive memory locations," as recited, with other limitations, in the context of Claim 29.

None of the references relied on, singly or in any motivated com-

bination, are seen to teach or suggest the claimed features of: "a dimension field identifying the dimension of the texture map," as recited, with other limitations, in the context of Claim 35.

Conclusion

Thus, all grounds of rejection and/or objection are traversed or accommodated, and favorable reconsideration and allowance are respectfully requested. The Examiner is requested to telephone the undersigned attorney or agent for an interview to resolve any remaining issues.

Respectfully submitted,



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